

DC COMPONENTS CO., LTD.

DISCRETE SEMICONDUCTORS

LB120A

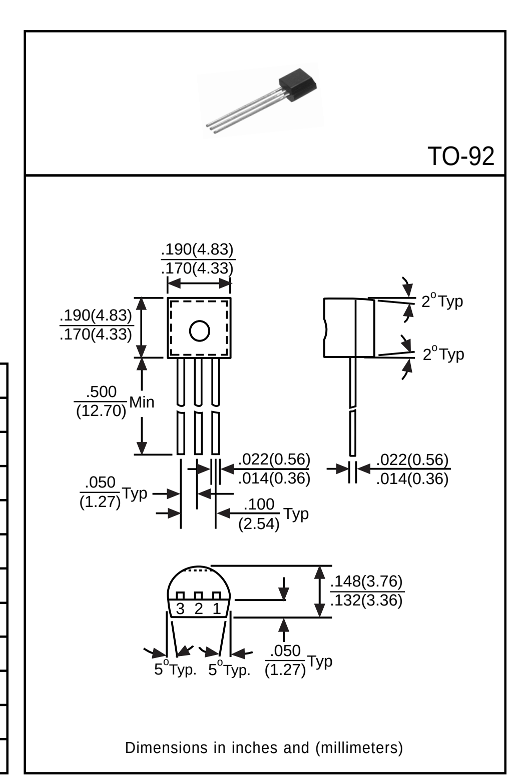
TECHNICAL SPECIFICATIONS OF NPN TRIPLE DIFFUSED PLANAR TRANSISTOR

Description

Designed for use in high-voltage switching applications.

Pinning

1 = Emitter
2 = Collector
3 = Base



Absolute Maximum Ratings(T_A=25°C)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	600	V
Collector-Emitter Voltage	V_{CEO}	400	V
Emitter-Base Voltage	V_{EBO}	6	V
Collector Current (DC)	I_C	100	mA
Collector Current (pulse)	I_C	200	mA
Base Current (DC)	I_B	20	mA
Base Current (pulse)	I_B	40	mA
Total Power Dissipation	P_D	0.8	W
Total Power Dissipation(T_C=25°C)	P_D	7	W
Junction Temperature	T_J	+150	°C
Storage Temperature	T_{STG}	-55 to +150	°C

Electrical Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified)

Characteristic	Symbol	Min	Typ	Max	Unit	Test Conditions
Collector-Base Breakdown Volatge	BV_{CBO}	600	-	-	V	I_C=100µA, I_E=0
Collector-Emitter Breakdown Voltage	BV_{CEO}	400	-	-	V	I_C=10mA, I_B=0
Emitter-Base Breakdown Volatge	BV_{EBO}	5	-	-	V	I_E=10µA, I_C=0
Collector Cutoff Current	I_{CBO}	-	-	10	µA	V_{CB}=550V, I_E=0
	I_{CEO}	-	-	10	µA	V_{CE}=400V, I_B=0
Emitter Cutoff Current	I_{EBO}	-	-	10	µA	V_{EB}=6V, I_C=0
Collector-Emitter Saturation Voltage(1)	$V_{CE(sat)1}$	-	-	0.4	V	I_C=50mA, I_B=10mA
	$V_{CE(sat)2}$	-	-	0.75	V	I_C=100mA, I_B=20mA
Base-Emitter Saturation Voltage(1)	$V_{BE(sat)}$	-	-	1	V	I_C=50mA, I_B=10mA
DC Current Gain(1)	h_{FE1}	8	-	-	-	I_C=10mA, V_{CE}=10V
	h_{FE2}	10	-	36	-	I_C=50mA, V_{CE}=10V

(1)Pulse Test: Pulse Width≦380µs, Duty Cycle≦2%